UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,416	07/08/2004	Hsu-Feng Ho	22171-00017-US1	4415

30678 7590 10/06/2006

CONNOLLY BOVE LODGE & HUTZ LLP
P.O. BOX 2207
WILMINGTON, DE 19899-2207

EXAMINER	
TRAN, THANG V	

ART UNIT	PAPER NUMBER
2627	

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/710,416	HO ET AL.	
	Examiner	Art Unit	
	Thang V. Tran	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-19 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) 1-12 is/are allowed.

6)☒ Claim(s) 13-19 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 13-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamaguchi et al (US 5,268,883).

Regarding claim 13, see Fig. 1 of Yamaguchi et al. which discloses a device for performing switching servo gains and offsets for an optical disk drive, comprising microcomputer (26) for performing a step determining the location of a pick-up head on an optical disk; circuit (42) for performing a step of outputting a signal after the conversion from a servo signal (tracking error signal) by a first gain with a bigger gain if the pick-up head stays at a location (ROM area RM) with a low reflective ratio on the optical disk; and outputting a normalized signal referring to the outputting level of the first gain after the conversion from the servo signal by a second gain with a smaller gain if the pick-up head stays at a location (recording area RD) with a high reflective ratio on the optical disk (see column 8, line 40 to column 11, line 10).

Regarding claim 14, see tracking error signal output from circuit 41.

Regarding claim 15, see the outputted servo signal is from the conversion of the first gain when the pick-up head is in a blank area (recording area where data to be recorded is

interpreted as blank area) , and the outputted servo signal is from the conversion of the second gain when the pick-up head is in a data area (Rom area RM).

Regarding claim 16, see column 12, lines 30-36.

Regarding claim 17, see the offset and again calculated by microcomputer 26. The method for switching servo gains and offsets for an optical disk drive of claim 13, further comprising the step of: determining the values of a first offset, a second offset, a first gain unit and a second gain unit by means of on-line or off-line detecting the servo signal.

3. Claims 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohshima (US 5,436,877).

Regarding claim 18, see Fig. 1 of Ohshima which discloses a control system in which includes a controller (8) for performing a step of determining the location of a pick-up head on an optical disk; circuit (10) for performing a step of outputting a signal after the conversion from a servo signal (tracking error signal) by a first gain with a smaller gain if the pick-up head is in a tracking status (tracking following) and outputting a normalized signal referring to the outputting level of the first gain after the conversion from the servo signal by a second gain with a bigger gain if the pick-up head is in a seeking status (track positioning operation or seeking operation).

Regarding claims 19 and 20, see gains G1 and G2.

4. Claims 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsai (US 7,092,323).

Regarding claim 18, see Fig. 3 of Tsai which discloses a control system in which includes a controller (33) for performing a step of determining the location of a pick-up head on an optical disk; circuit (331-333) for performing a step of outputting a signal after the

conversion from a servo signal (focusing error signal) by a first gain (331) with a smaller gain if the pick-up head is in a tracking status and outputting a normalized signal referring to the outputting level of the first gain after the conversion from the servo signal by a second gain (332)with a bigger gain if the pick-up head is in a seeking status.

Regarding claims 19 and 20, see gains in compensators 331 and 332.

Allowable Subject Matter

5. Claims 1-12 are allowed over the prior art of record because all of references of the prior art, considered alone or in combination, fails to suggest or fairly teach an apparatus including a combination of all of features and their structural arrangement as particularly recited in claim 1. Claims 2-12 are allowed with their respective parent claim.

Cited References

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references relate to an optical apparatus including first gain and a second gain for different modes of servo operations.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thang V. Tran whose telephone number is (571) 272-7595. The examiner can normally be reached on M-F 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nguyen Hoa can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thang V. Tran
Primary Examiner
Art Unit 2627